Diploma in Financial Management

Module B

PAPER DB1, INCORPORATING SUBJECT AREAS
– FINANCIAL STRATEGY
– RISK MANAGEMENT

TUESDAY 5 DECEMBER 2006

QUESTION PAPER

Time allowed **3 hours**

This paper is divided into three sections

Section A	ALL 20 questions are compulsory and MUST be answered
Section B and Section C	THREE questions in total to be answered. Candidates MUST answer ONE question from Section B, ONE question from Section C and ONE further question from either Section B or Section C.

Present Value Rates are on page 2.

Do not open this paper until instructed by the supervisor

This question paper must not be removed from the examination hall

The Association of Chartered Certified Accountants

Present value of £1 receivable in n years at x%

n \ x	8%	10%	15%
0	1·00	1·00	1·00
1	0·93	0·91	0·87
2	0·86	0·83	0·76
3	0·79	0·75	0·66
4	0·74	0·68	0·57

Section A – ALL 20 questions are compulsory and MUST be attempted

Each question within this section is worth 2 marks.
Please use the Candidate Registration Sheet provided to indicate your chosen answer to each multiple choice question.

1 Bellever Engineering plc makes a bonus issue of shares during the year.

Which one of the following will occur as a result of the issue?

A Liquidity will be increased

B Total shareholders' funds will be increased

C Earnings per share will be lowered

D The gearing ratio will be lowered

2 Cramber Business Services plc recently made a tender offer of shares and the following offers were received:

Share price	Number of shares tendered at each share price (000s)
£3·80	480
£3·00	650
£2·20	760
£1·40	820

Assuming that the company wishes to maximise the receipts from the issue, what will be the striking price?

A £3·80

B £3·00

C £2·20

D £1·40

3 Legis plc has 20 million £0·50 ordinary shares and irredeemable loan capital with a nominal value of £40 million in issue. The ordinary shares have a current market value of £2·40 per share and the loan capital is quoted at £80 per £100 nominal value. The cost of ordinary shares is estimated at 11% and the cost of loan capital is calculated to be 8%. The rate of corporation tax is 25%.

What is the weighted average cost of capital for the company?

A 7·0%

B 9·0%

C 9·5%

D 9·8%

4 Watern plc has ordinary shares in issue with a par value of £0·50 and a price earnings ratio of 10 times. The dividend per share is £0·15 and the dividend cover ratio is 2·0 times.

What is the dividend yield of a share in the company? (Ignore taxation)

A 20·0%

B 5·0%

C 3·0%

D 1·5%

5 Vixen plc has warrants in issue that can be used to subscribe for ordinary shares in the company on a one-for-one basis in six months' time at an exercise price of £4·50. The warrants are currently quoted at £1·20 and the current share price is £5·40.

What are the warrant conversion premium and the intrinsic value of the warrant?

	Conversion premium	Intrinsic value
A	£1·20	£0·90
B	£0·30	£0·90
C	£1·20	£1·50
D	£0·30	£1·50

6 Lydford Electronics plc has issued nominal share capital of £10 million, made up of £0·25 ordinary shares, and a market capitalisation of £20 million. The company expects post-tax profits for the forthcoming year to be £8 million and wishes to maintain a constant dividend payout ratio of 25%. Dividends are expected to increase by 3% per year for the foreseeable future.

What is the expected rate of return from the ordinary shares?

A 7%

B 13%

C 17%

D 23%

7 **Which one of the following statements concerning financing is correct?**

A Warrant holders receive a dividend on the warrants held

B A share repurchase will reduce distributable reserves

C Securitisation involves converting assets that provide a future stream of income into equity

D Preference share capital may be secured on the assets of the company

8 Sourton Ltd wishes to forecast its financial performance and position for the forthcoming year. The forecast model used by the company incorporates the following relationships:

Sales: non-current assets	2·4:1
Non-current assets: current assets	0·8:1
Current ratio	1·0:1
Acid-test ratio	0·6:1

The sales for the forthcoming year are expected to be £50 million

What is the forecast level of inventory to be held at the end of the year?

A £60·0m

B £38·4m

C £10·4m

D £6·0m

9 Beardown Supplies plc holds an item in stock with the following supplier lead times and consumption rates:

	Maximum	Minimum
Daily consumption	40 units	25 units
Supplier lead times	12 days	2 days

The economic order quantity for this item is 400 units and company policy is to maintain a buffer stock of 200 units at all times.

What is the highest possible number of units of the item that could be held in stock?

A 1,080

B 1,030

C 600

D 550

10 Steeperton plc is committed to maximising the wealth of its shareholders.

Given this objective, which one of the following methods of investment appraisal is most appropriate for the company to use?

A Net present value

B Internal rate of return

C Payback period

D Accounting rate of return

11 Consider the following two statements concerning investor attitudes towards risk:

1. A risk-averse investor will *only* be prepared to invest in a project with the prospect of high returns if there are no risks involved.
2. A risk-seeking investor will readily invest in a project with prospects of high returns, even if it means carrying substantially high risk.

Which one of the following combinations relating to the above statements is correct?

	Statement 1	Statement 2
A	True	True
B	True	False
C	False	True
D	False	False

12 Coombeshead plc has ordinary shares in issue that pay a constant dividend per share of 25p and have a beta of 1·2. The current market rate of return is 8% and the risk-free rate of return is 2%.

What is the predicted market value of each share of the company (to the nearest pence)?

A 179 pence
B 216 pence
C 272 pence
D 347 pence

13 Consider the following two statements:

1. One form of hedging is where an investor buys shares in one market and sells them immediately in another to profit from price differences between the two markets.
2. One form of financial derivative is a preference share of a business.

Which one of the following combinations relating to the above statements is correct?

	Statement 1	Statement 2
A	True	True
B	True	False
C	False	True
D	False	False

14 An investor has a call option on 10,000 ordinary shares in Littaford plc. The option premium was 40 pence per share and the strike price is 650 pence per share. At the expiry date of the option the share price was 680 pence.

Should the option be exercised and what is the net gain (loss) for the investor?

	Exercised	Net gain (loss)
A	No	(£1,000)
B	Yes	(£1,000)
C	Yes	£3,000
D	No	£4,000

15 Rippon plc has a £50 million fixed-rate loan on which it pays interest at the rate of 7·8% per year. The company would like to undertake a swap agreement with a bank to exchange the fixed-rate commitment for a floating-rate commitment. A swap bank is prepared to pay a fixed rate of interest of 7·5% per year and to receive LIBOR in return. LIBOR during the first year was 7·1%.

What is the effective interest rate for the company for the first year of the swap agreement?

A 6·8%

B 6·7%

C 7·4%

D 8·2%

16 The cost of equity capital for an ungeared company is 10%. A similar but geared company in the same risk class is financed by 60% equity and 40% loan capital. The rate of corporation tax is 20%.

Using Modigliani and Miller (including taxation), what is the weighted average cost of capital of the geared company?

A 8·0%

B 8·7%

C 8·8%

D 9·2%

17 Thomworthy plc, which is financed entirely by equity, earns a constant return of 10% on its investments. The company has a constant dividend payout ratio of 40% and the earnings per share of the company is expected to be 50 pence at the end of the forthcoming year.

What is the predicted market value of each share of the company?

A 200 pence

B 206 pence

C 333 pence

D 500 pence

18 Various views have been expressed concerning the most appropriate dividend policy for a company to adopt.

Which one of the following reflects the views expressed by Miller and Modigliani?

A The dividend policy selected by a company should be of no consequence to shareholders.

B Dividends should only be paid to shareholders if a company has no investment opportunities available that have the potential for positive returns.

C A company should seek to maximise dividend payouts in order to maximise shareholder wealth.

D Shareholders should be paid high dividends in order to have funds available to invest outside the company.

19 A colleague claims that the Combined Code recommends that, for large listed companies, non-executive directors should comprise:

1. At least half the board (excluding the chairman).
2. The majority of the nomination committee.
3. At least half of the remuneration committee
4. The majority of the audit committee

Which two of the above statements are correct?

A 1 and 2

B 1 and 3

C 2 and 4

D 3 and 4

20 Consider the following statements concerning derivatives.

1. Futures contracts may not be traded on an organised exchange
2. Forward contracts may be traded on an organised exchange

Which one of the following combinations (true/false) concerning the above statements is correct?

	Statement 1	Statement 2
A	True	True
B	True	False
C	False	True
D	False	False

(40 marks)

Section B – Candidates MUST attempt ONE question from Section B, ONE question from Section C and ONE further question from either Section B or Section C.

1 Hartland plc is a large toy manufacturer that has recently been approached by the owners of the patent of a new toy that has become extremely popular in SE Asia. They have offered Hartland plc exclusive rights to make and distribute the toy in Europe for an immediate payment of £3·2 million and a royalty payment of £1 for each toy produced and sold. To assess the feasibility of the offer, Hartland plc appointed a specialist firm of marketing consultants, at a cost of £0·5 million, to provide a report on the market potential of the new toy in Europe. The report, which has just been produced, concluded that Hartland plc could sell the new toy for £9 each and that 400,000 toys could be sold each year during its anticipated four-year life.

To produce the toy, equipment costing £1 million would be required immediately: this would have a residual value at the end of four years of £0·5 million. The variable costs of production (excluding the royalty payments) are expected to be £3·25 per unit and the fixed costs (excluding depreciation) are expected to be £1·2 million per year. Half of these fixed costs have been apportioned to the new product based on a 'fair share' of the fixed costs relating to the company as a whole and half directly relate to the production of the new toy.

Hartland plc is financed entirely by equity and the company's shares have a beta of 1·2. The market rate of return is 9% and the risk-free rate of return is 4%.

Ignore taxation and work to one decimal place in £millions.

Required:

(a) Calculate the net present value for Hartland plc of producing and selling the new toy. (7 marks)

(b) Carry out sensitivity analysis to show by how much each of the following would have to change before producing and selling the new toy would no longer be worthwhile:

(i) the residual value of equipment;
(ii) the net annual operating cash flows;
(iii) the discount rate. (11 marks)

(c) Briefly comment on the information contained in your answers to (a) and (b) above. (2 marks)

(20 marks)

2 Branscombe Ltd is an importer and distributor of textiles from China with a customer base that consists of small retailers scattered throughout the UK. Sales, which accrue evenly over the year, are all on credit. In recent years, sales have stabilised at £15 million per year. However, the company has experienced increasing problems with collecting the amounts due. The average settlement period for debtors is currently 70 days compared to 45 days two years earlier. The level of bad debts has also increased and the company now incurs around £110,000 worth of bad debts each year.

The increasing difficulties experienced in collecting the amounts owed have contributed towards severe liquidity problems and the business now has a £4 million overdraft with the bank, on which it pays interest at the rate of 11% per year. The directors of the company are determined to reduce the size of the overdraft and so have approached a factor who has offered to make an advance equivalent to 80% of trade debtors, based on the assumption that the average collection period will revert to 45 days. The factor will charge 10% interest per year for the advance. The factor will take over the administration of the credit sales for which there will be a charge of 3% of sales value. The directors of the company believe that the factoring agreement can lead to administrative cost savings of £145,000 per year and the elimination of bad debts.

Required:

Prepare a report for the directors of Branscombe Ltd, which sets out:

(a) the net financial benefit (or cost) to the company of employing the debt factor; (10 marks)

(b) the advantages and disadvantages of employing the services of a debt factor; (7 marks)

(c) an alternative form of short-term, external finance that might be used to deal with the problems experienced by the company. (3 marks)

(20 marks)

3 The balance sheet of Hameldown plc, a telecommunications business, revealed the following long-term capital structure as at 30 November 2006:

	£m
Ordinary shares 50p fully paid	80·0
Share premium account	30·0
Retained profit	135·0
	245·0

The company is listed on the London Stock Exchange and the current share price is £4·20.

The company recently repaid all of its long-term loan capital.

The company has decided to invest heavily in new technology and, as a result, has identified an immediate long-term financing requirement of £48 million. To raise the necessary funds, the directors of the company are considering two possible options. The first is to make a one-for-eight rights issue at a discount price of £2·40 per share. The second option is to take out a long-term debenture at an interest rate of 7·5% per year. If the share option is selected, it is expected that the price earnings (P/E) ratio will fall by 5% and if the debenture option is selected, it is estimated that the P/E ratio will rise by 6% by the end of the year to 30 November 2007.

In the year to 30 November 2006, the net profit before interest and taxation for the company was £60 million and it is expected that this will increase by £15 million during the forthcoming year. The company intends to make no dividend payments during the year.

Assume a corporation tax rate of 20%.

Required:

(a) Assuming a rights issue of shares is made, calculate

(i) the theoretical ex-rights price of an ordinary share in Hameldown plc, and
(ii) the value of the rights for each original ordinary share. (5 marks)

(b) Estimate the price of an ordinary share in Hameldown plc on 30 November 2007 assuming:

(i) a rights issue is made;
(ii) a debenture issue is made.

and discuss your findings (12 marks)

(c) Explain, from the company's viewpoint, how critical the pricing of a rights issue is likely to be. (3 marks)

(20 marks)

Section C – Candidates MUST attempt ONE question from Section B, ONE question from Section C and ONE further question from either Section B or Section C.

4 Mistor S.A. is a large, event-management business based in Spain that has recently agreed to organise a large trade fair in the US. On 1 August 2007, the company expects to receive \$10 million for the work carried out and expects to pay suppliers and sub-contractors \$7 million for their contribution to the fair. The company wishes to hedge against the risk of currency fluctuations and is considering the use of either a forward contract or futures contracts to achieve this. It is now 1 December 2006 and the following information is available:

1. The spot rate is quoted as \$1·2300 per € and the August 2007 forward rate is quoted at a premium of 2·10 cents per €.
2. Euro futures contracts with a September 2007 settlement date are quoted at \$1·1950 per €.
3. The contract size for euro futures is €125,000 and the tick value of each contract is \$12·50.

Assume that on 1 August 2007 the spot rate is \$1·1860 per € and that the September 2007 futures price will be \$1·1640 per €.

Required:

(a) State, with reasons, how much should be hedged using either a forward contract or a futures contract. (2 marks)

(b) Assuming a forward contract is used to hedge against currency risk, calculate the net amount to be received in euros. (3 marks)

(c) Assuming futures contracts are used to hedge against currency risk, calculate the number of futures contracts required, the total profit or loss arising from using futures contracts and the net amount to be received in euros. (7 marks)

(d) Discuss the main features of forward contracts and futures contracts and comment on the results obtained in your calculations in (b) and (c) above. (8 marks)

(20 marks)

5 Stenga plc has recently been taken over and is now a wholly-owned subsidiary of a large listed company. The new board of directors of Stenga plc are seeking to implement a risk management system to comply with the requirements of the parent company. At a recent board meeting of Stenga plc it was agreed that the risks faced must be identified and prioritised as a matter of urgency and that the internal control department, which has hitherto been exclusively concerned with the integrity of the company's financial reporting systems, should play a key role in the risk management process.

Required:

Prepare a report to the board of directors which sets out:

(a) the methods that can be used to help identify and prioritise the risks faced by the company; (10 marks)

(b) (i) the role that the internal control department can play in helping the board of directors to manage the risks confronted by the company, and

(ii) what issues may have to be addressed to enable the internal control department to fulfil this new role. (10 marks)

(20 marks)

6 Easdon plc is a fast-growing electronics business that is committed to maximising shareholder value. The directors intend to float the company on the London Stock Exchange in the near future and, as part of the preparation process for this event, are considering changes to the directors' incentive plan. To date, the directors have received bonuses based on annual growth in earnings per share. It has been suggested, however, that it would be more appropriate to use either total shareholder return (TSR) or economic value added (EVA®) as a basis for their reward.

Required:

(a) Briefly state the key characteristics that a measure, which will be used to provide an appropriate basis for rewarding directors, should possess. (4 marks)

(b) Discuss the problems of using annual growth in earnings per share as a basis for rewarding the directors. (4 marks)

(c) Critically evaluate the separate use of:

(i) TSR and;
(ii) EVA®

as a basis for rewarding the directors of Easdon plc. (12 marks)

(20 marks)

End of Question Paper